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Michael Bauer

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AMAKWE, TAMRA L

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/531,389
Filing Date: September 28, 2005
Appellant(s): BAUER ET AL.

Brian A. Tollefson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/21/10 appealing from the Office action mailed 07/21/10.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

A related appeal has been made in co-owned, U.S. Patent Application No. 10/490,478.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-10 and 11-16 are pending.

Claim 11 is withdrawn.

Claims 1-10 and 12-16 are rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

6,098,546	SCHELL	08-2000
6,060,143	TOMPKIN ET AL.	05-2000
7357077	ADAMCZYK ET. AL	04-2008
20080290647	ADAMCZYK ET AL.	11-2008
7,311,043	MAYER ET AL.	12-2007
6,474,695	SCHNEIDER ET AL.	11-2002
4,715,623	ROULE ET AL.	12-1987

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Double Patenting

Claims 1-10 and 12-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over: 1) claims 8-27 of US 7357077 (Adamczyk) in view of US 6,060,143 (Topkin et al.); 2) claims 1-24 of

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US 20080290647 (Adamczyk , the corresponding application 11/979107 is now patented, yet to receive a number) in view of US 6,060,143 (Topkin et al.); and 3) US 7311043 (Mayer et al.) in view of US 6,060,143 (Topkin et al.)

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims contain tactile perceptible print, however, the patented claims have embossed and intaglio printed areas and thus are the same to the touch. The patented claims are absent a foil with gaps applied to the carrier.

However, Topkin teaches a data carrier (shown in Figs. 2, 5, 7, 9, and 11-12 and associated text) comprising a discontinuous cover layer 9 (reflective material and thus considered a foil) creating windows (gap) covering microscopically fine (embraces ranges of 5-100 or 500 microns) relief structure 15 in part and the relief is on a carrier (3). Note at least two relief structure areas are taught. See at least abstract, 3:45-68, cols. 8 and 9, and 6:10-20 to embossing features, and patented claims 1-17. Topkin does not explicitly show a print layer but teaches a print layer, covers the relief in order to avoid undesired, visually perceptible diffraction effects at the relief structures 15. See 4:25-30.

Thus the areas where and where not are printed and embossed are tactilely perceptible. See also 4:20-45, 6:15-50. It would have been obvious to use the specific resin material for the cover over the relief print to protect it and still enable feel as the gaps make it so.

Claim Rejections - 35 USC § 103

Claims 1-6, 8-10, and 12-16 are rejected under 35 U.S.C. 103(a) as obvious over Schell (US 6,098,546) in view of Topkin et al. (US 6060143).

Re Claims 1, 6, and 13-16: Schell teaches a data carrier (paper for securities) printed via intaglio print. See 1:15-55, 2:10-15, 3:1-25. The intaglio print provides a relief structure which is discernible to touch (1:25). This is equivalent to a tactile perceptibility. Schell discloses it is a well known to traditionally print on paper with intaglio print (re claims 1 and 16). Thus the areas printed and embossed are tactilely perceptible. Schell clearly states that the relief print from intaglio printing produces ink that is approximately 20 microns thick. This range falls into Appellant's range of approximately 5 to 100 microns (claims 1 and 16.) Schnell goes on to state the relief is discernible to touch, usually having a height of 40 microns from approximately 20 micron thick ink layer and a 20 micron embossing (See 1:15-55, especially lines 25 and 43-46. See further 2:10-15, 3:1-25.) The improvement of Schell relies upon the higher speeds of the print rollers which deforms the surface of the paper (therefore this process imprints the paper) to yield high register accuracy with expensive OVI inks.

Schell does not teach a foil over the imprint.

Topkin teaches a data carrier, such identification cards (shown in FIGs. 1-2 and associated text). These comprise a discontinuous cover layer 9 (reflective material and thus considered a foil –see 2:57) creating windows (gap 7, FIG. 1. Gap 16 and 17, Fig.

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2.) It covers the microscopically fine (embraces micron range) relief structure in parts.

The relief is on carrier (3). At least two relief structure areas are taught (see 5 and 6 of Fig. 1 and 2:25-30 and Fig. 2 upper and lower sides of carrier 3. See at least Abstract, 3:45-68, cols. 8 and 9, 6:10-20 to embossing features, and patented claims 1-17.)

Topkin also teaches a print layer covers the relief in order to avoid undesired, visually perceptible diffraction effects at the relief structures 15 (See 4:25-30, 6:15-50.)

It would have been obvious to one having ordinary skill in the art to have modified the security of Schell by including a foil partially on non-covered and covered printed areas to maintain tactile perceptibility because Topkin teaches the gaps created by the discontinuous cover foil is not only protective, but reflects light at different angles to aid in further providing a security feature to identification card data carriers (see citing of Topkin above).

Re claim 2: the printed area contains blind-embossed areas because no ink is present in between where ink is present, (See roller 3 in the Figure. See 4:1-25.)

Re claim 3: The non-covered area functions as claimed as set forth above.

Re claims 4 and 14: The foil has at least one gap or window in it as set forth above.

Re claims 5 and 10: Regarding claim 5, the film is considered to have a not very pronounced surface relief.

Regarding claim 10, the printed area is considered to have a pattern which extends essentially seamlessly between the area covered with film and the uncovered area.

Because Schell teaches the ink layer thickness are metered by modulation of frequency of the screen printing mesh holes to yield more or less holes, the surface relief printed area thickness is a result effective variable.

It is obvious to shape or size it also dependent upon how much concealing is desired. The optimal and/or claimed values of the respective material would have been obvious to the skilled artisan at the time the invention is made. It has long being held that such discovery, such as an optimum value of the respective result effective variable involves only routine skill in the art. See MPEP § 2144.05 II (B).

Re claim 6: identification cards are taught as a carrier as set forth above. (See identification card 13, Fig. 1, Topkin.)

Re claim 8: The foil thickness is not taught to be less than 20 microns. The reference teaches that it is thin (2:55-60).

It would have been obvious to one having ordinary skill in the art to have modified the security combination by altering the thickness of the foil to effectively conceal or reveal the underlying relief for more or less protection dependent upon the

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desired areas to cover as taught by Tompkin. This modification aids in effecting the feel and optical viewing properties aiding in security measures as cited above.

Re claims 9 and 10: The pattern of the reference is considered to be a finely structured pattern (embraces design patterns such as guilloches).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schell (US 6,098,546) in view of Tompkin et al. (US 6060143) as applied to claim 1 above, and further in view of US 6,474,695 to Schneider et al.

The combination of Schell (US 6,098,546) in view of Tompkin et al. (US 6060143) is applied to claim 1 as set forth above.

Re claim 7: The combination does not teach holographic embossed structures.

Schneider teaches security bank notes and ID (identity) cards having optically effective structures such as embossed holograms or diffraction or relief structures to affect the different viewing angles and coloring, (See 3:25-41, 4:1-55, col. 6 and col. 11.)

It would have been obvious to one having ordinary skill in the art to have modified the combination to include holograms or surface reliefs as claimed because Schneider teaches that holographic embossed structures add to differing angles and coloring of a security document as cited above.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schell (US 6,098,546) in view of Topkin et al. (US 6060143) as applied to claim 1 above, and further in view of Roule (US 4715623).

Re Claim 2: If the combination is not considered to teach a blind-embossed area because the reference does not expressly state the embossing areas are “blind-embossed” the following rationale is noted.

Roule teaches unlinked areas of intaglio plates (is otherwise known as blind embossing) to provide contrast and concealed identifier to a paper. See at least Abstract, and cols. 1-2. It would have been obvious to one having ordinary skill in the art to have modified the combination to include blind embossed areas because Roule teach they add further depths of security as cited above.

(10) Response to Arguments

Securities ranging from monetary notes to passports or credit cards have used multiple effects to protect against counterfeiting. Certain age-old features include metal deposited over indicia to prevent the reading of the indicia in the event the carrier is xeroxed. Certain specialty inks with embossment reliefs, metal particles or flakes also yield a degree of security by feeling the print and/or by tilting the US 100 dollar bill one can see the optical color changes from red to green. Protective foil films provided by lamination are well known to preserve and protect the indicia that found on a passport.

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Of course naturally other reasons such as to protection from dust and debris over time also result from lamination. Appellant's instant invention uses such a variety of security features which are not novel.

In summary, Appellant's invention of claim 1 structurally is a carrier such as paper, printed via intaglio printing and partly covered by a foil. The prior art of record provides this and more.

Appellant alleges since the instant specification film thickness is three times the thickness of Tompkin, it can't provide the protective feature. Regarding films that cover the indicia, see Appellant's [0028] providing an option that thin films are be used, less than 15 microns thick. Further, instant claim 8 recites thin film ranges of less than 20 microns which provide the same degree of protection as Tompkin because Tompkins' film thickness is also within this range. Moreover, Tompkin is the secondary reference, only relied upon for teaching a cover i.e. protective layer can be placed over the tactile relief of Schell. Thus it is already established that Schell teaches intaglio printing is thick enough on its own, without any additional protective layer above it, to be tactilely felt. Thus once a foil as thin as 0.2 microns covers the intaglio indicia as thick as feelable 50 microns, one having ordinary skill in the art of securities and knowledgeable of scientific principles would understand that the indicia would still be felt through the thinner cover foil because the feelable indicia is thicker than the cover foil. Thus the indicia would still be able to be felt when the foil is applied over it therefore maintaining the tactile perceptibility. Therefore, this answers Appellant's arguments to the Examiner not providing a rationale for combining the relief of Shell with Tompkin.

Further, it is noted that the Tompkin reference is merely being used to show that a protective layer may be added over the printing that is identified in the primary reference. Although Tompkin teaches a variety of uses for the protective layer, The application of Tompkin in the rejection is simply to show that one of ordinary skill in the art would be motivated to add a protect layer over the printing as taught in Tompkin. It is not being applied for the other teachings found in the reference. The material will provide protection to the printing.

Appellant's background of the specification in [0005] states in the past security elements having intaglio printing are characterized by their "typical" tactility easily recognizable even to the layman and cannot be imitated with common copying machines. See the instant specification further up until [0009]. Thus it is clear that intaglio printing alone provides tactile perceptibility. Appellant also states the application of the film is applied to a substrate already printed in intaglio printing and is applied by glue or hot lamination in Appellant's [0031]. Therefore, the film doesn't provide any kind of protection pertaining to tactile ability solely as this directly comes from the intaglio printed indicia.

The interpretation of claim 1 language regarding the film application being applied in such way that the tactile perceptibility of the intaglio printing is maintained (as first amended on 9/8/2008), was read in light of the specification. Appellant has stated that it is the intaglio printing process that provides the touch, and not the protective cover, as found in [0009], [0018-0020]. For instance in Appellant's [0020], it is stated

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that it is “expedient” to use a flat intaglio print even with thin films under 15 micrometers (which Tompkin’s cover layer nanometer thickness falls in this range) to provide the particular increased tactility in above [0019]. See also [0023] of Appellant’s instant specification further stating that below a relief height of approx. 50 microns, the print relief printed by intaglio printing is tactilely perceptible. This is the exact same height range that the primary reference, Schell teaches (at most 50 microns, see col. 1, line 52). Thus when read in light of the specification yields a foil as mere protective cover and the intaglio printed indicia providing the tactile perceptibility. The applied prior art thus meets the claims.

Additionally, Appellant hasn’t limited the protective foil as claimed to be of a certain degree of thickness or transparency. Also note that Tompkins’ protective lacquer layer 48 is an optional layer that provides the same degree of protection Appellant desires and would meet claim 1 on its own. See Tompkin, 8:56-59. Tompkin states the same reason Appellant does by stating the protection is from mechanical damage in 8:59. Which Appellant’s instant specification in [0010] states the same desire to protect the printed images from strong mechanical loads. Further Appellant provides reference EP 0364730A2 that already teaches a transparent film over indicia, but concludes that up unto this point, it is no longer tactilely perceptible if executed by intaglio printing in [0012]. The belief in instant [0012] is directly contradictory to the teachings of Schell which does teach intaglio printing has a height that is able to be felt.

Appellant argues even if the “top” layer (which is actually taught by Tompkin as the “cover” layer, which by Webster dictionary standards the definition means something that protects) were applied to the surface web of Schell, the cover layer would not protect the print area based off the thickness being smaller than the relief height of the intaglio imprint. Appellant seems to be only focused on one characteristic of the foil of Tompkin, namely the thickness. The Examiner submits that the protective feature of the “cover” layer 9 of Tompkin is found in its structural relation to the relief, its thickness, and its opaqueness. Thus cover layer 9 is multiply functional in that respect. As noted in col. 2, lines 60-65 the cover layer 9 in conjunction with other layers form structures that protect against forgery. This is the main goal of the patent, to protect from forgery, which is also a goal of the Appellant as found in the instant specification within [0013].

Appellant argues further the optically effective structure 6 in Fig. 1 affects the visible light, alleging no tactile perceptibility would be found. The Examiner is not in agreement because the visible light is a separate and irrelevant issue to the feelable thickness of the cover layer of Tompkin providing a degree of protection. The optical effects of Tompkin are not precluded from the claim despite Appellant’s argument. tactile perception. If anything the optical affects are strengthened by the relief 15 directly embossed into carrier 3, and the foil follows the contours of the relief yielding not only optical effects, but effects that in the end prevents forgery.

Appellant argues gaps are not taught in the cover layer of Tompkin, however, the cover layer is shown discontinuous and gapped so the light can transmit through the portion where the metal cover is not. See Figs. 1, 2, and 12.

Appellant actually admits that tactile perception is a subjective sensation in [0022], and thus isn't as objective as argued in comparison to Tompkin's perceived interpretations.

Also, in col. 8, Tompkin describes cover layer 9 in Fig. 12 and an additional protective lacquer layer 48, which 48 could provide for Appellant's protective foil at least in claim 1. The cover layer 9 is covering an underlying relief 15.

Further there is nothing found within Tompkin that states Appellant's interpretation of Tompkin –“A relief height in the order of magnitude of the wavelength of visible light is has no tactile perceptibility.”.

However, Tompkin teaches relief structures have some profile height in micrometers at col. 2, line 38 and is visible to the eye. Schnell provides the relief structure has a larger height when printed with intaglio printing, and thus allowing for touch. Therefore the two would provide for reliefs printed with intaglio printing that provide the claimed tactile perceptibility.

Appellant argues a teaching away from gaps as it relates to Tompkin, but this isn't so because Tompkin explicitly teaches gaps in the cover layer because it is discontinuous, spaced just so transparent light can come through where the cover layer

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is etched away, and the light is blocked where the cover layer remains. See col. 11, lines 20-68 and col. 12, lines 1-20. See cover layer 9 in Figs. 1, 2, and 12.

Appellant argues claim 7, with the same arguments as presented over claim 1 and thus the Examiner repeats the same answers.

Appellant argues claim 2, with the same arguments as presented over claim 1 and thus the Examiner repeats the same answers.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Tamra L. Amakwe/

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